

## **CONVERTIBLE SHEET MATERIAL AND BAG**

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### **RELATED PATENT AND APPLICATION**

**[0001]** This application relates to U.S. Patent No 6,634,041, issued October 23, 2003, entitled "CONVERTIBLE TOWEL TO TOTE BAG ARTICLE AND METHOD OF MAKING SAME", and is a continuation in part of Application No 10/680,699, filed October 6, 2003. The contents of both the patent and the application are incorporated by reference herein.

### **BACKGROUND**

**[0002]** The present invention relates generally to the field of convertible sheet materials, more particularly to fabrics such as linens and towels, and still more particularly to combination towels and tote bags.

**[0003]** The difficulties associated with bringing such amenities or necessities as a large sports towel, jewelry, keys, wallets, reading materials, and various electronic gear to a gym, beach outing, or picnic are well known to many people. Not only must an individual carry such articles to and from a gym, beach, or picnic, but also the individual needs to keep the articles readily accessible while on the beach or at the picnic. The difficulties are exacerbated if the individual also has his or her hands occupied, for example, with carrying a food hamper or ice chest.

**[0004]** Various types of "carry-alls" are, of course, available, including tote bags and satchels, not to mention the ubiquitous plastic and paper grocery bags. However such known "carry-alls" are often inconvenient to carry and are often unattractive and/or are not "cool". In addition, "carry-alls" known to the present inventor do not have any function other than carrying articles.

## SUMMARY

[0006] In a first form, a towel to tote bag convertible article comprises a towel having a first end region, a second end region and an intermediate region between the first and second end regions. A pocket formed with the towel has an opening and is sized to receive and contain the towel.

[0007] In one form, the pocket is configured for being turned inside out to form a tote bag containing the towel.

[0008] Closure means, preferably a zipper, enables the closing of the pocket opening before and after the pocket is turned inside out.

[0009] Preferably, the convertible article includes a lining attached to the pocket, the lining forming the outside of the tote bag when the pocket is turned inside out. The lining may be constructed from a waterproof material. Also preferably the convertible article includes a tote bag carrying strap attached to the inside of the pocket, and the towel comprises a terry cloth sports towel.

[0010] In one form, a towel to tote bag convertible article comprises a sports towel having a first end region, a second end region and an intermediate region between the first and second end regions. A pocket is formed at and across the first end region, the pocket having an opening facing the second end region and being sized to receive and contain the second end region and the intermediate region, the pocket being configured for being turned inside out to form a tote bag containing the second end region and the intermediate region.

[0011] In another form, the towel to tote bag convertible article is arranged with a pocket in a position between the ends such that the ends can be folded and located in the pocket. This position can be midway between the ends or at some other suitable location. Preferably, the pocket is turned inside out to receive these ends. For instance the pocket can be located in the intermediate area.

[0012] In yet a different form of the invention, the pocket is arranged to receive an ice pack or heat pack and can thereafter be closed such that the item becomes a device for

use for instance medically on the surface of the body to apply heat or cold as may be necessary the bag or towel can wrap around the body to ensure anchorage on the body of the ice pack or heat pack as necessary. Ideally the ice pack or heat pack is contained in a waterproof lining in the pocket.

[0013] A tote bag carrying strap is attached to the inside of the pocket. A zipper is attached to the towel and to the pocket at the pocket opening for enabling the closing of the pocket opening before and after the pocket is turned inside out. Also included is a lining attached to the pocket, said lining, which may be constructed of a decorative or waterproof material, forming the outside of the tote bag when the pocket is turned inside out.

[0014] There is provided a corresponding method for constructing a towel, which may be a sports towel, that converts into a tote bag, the method comprising the steps of forming a towel having a first end region, a second end region and an intermediate region between the first and second end regions; making a pocket at the first end region having an opening facing the second end region and extending across the first end region and of sufficient size to receive and contain the second end region and the intermediate region.

[0015] The steps of forming a tote bag include turning the pocket inside out with the second end region and the intermediate region contained in the tote bag; and of providing a common closure for the pocket and the tote bag.

[0016] A tote bag carrying strap is included to the inside of the pocket and is attached to a lining, which may be made of a decorative material and/or a waterproof material. This strap is inside the pocket, and the lining forms the outside of the tote bag when the pocket is turned inside out.

[0017] The towel may have additional pockets arranged laterally and/or longitudinally in different sectors and sides of the towel. The towel can also be divided into segments so that different size portions of the towel can be used separately or together in the convertible system.

[0018] In yet a further form, the pocket occupies the width of the towel or less than the width of the towel. One or more corners of the pocket can be rounded to facilitate a smooth construction when the pocket is inverted so that the towel can be located in the invented pocket. In another manner when the pocket is located at one end of the towel, the towel has rounded corners at least if the two ends where the pocket is located rather than straight edged corners. These rounded corners are co extensive with the corners of the pocket. The other two corners of the towel has the opposite end may be straight edged or can provide rounded corners as desired.

[0019] In yet a different form, a portion of the towel can have features such that the towel is for instance not rectilinear but may be shaped in a rounded fashion for instance as a basketball or a football. Other shapes can be provided in adherence with the pocketed portion.

[0020] In yet another form, the towel can include partially separable areas so that when the areas are separated folding is facilitated into a smaller width of size. In this fashion a bag can be located over only a portion of the width and can be effectively smaller than the entire width of the towel. In this manner the towel can be compactly folded into a bag alternatively smaller size than a bag located over the entire width of the towel.

[0021] There is also a sheet material to bag convertible article. The article comprises a sheet material having a first end region, a second end region and an intermediate region between said first and second end regions; and a pocket formed along the sheet material at a region between the ends. The pocket has an opening facing said second end region and being sized to receive and contain at least one end region and said intermediate region. The pocket is configured for being turned inside out to form a bag containing at least one said end region and said intermediate region. A closure means for enabling the closing of said pocket opening after said pocket is turned inside out. Where there is a lining it is preferably attached to said pocket, said lining forming the outside of said bag when said pocket is turned inside out. The lining is constructed from a waterproof material.

[0022] The sheet material is a fabric or natural product such as leather. The convertible product can be blanket in its extended form or other article of utility for use by a user as a consumer article.

## DRAWINGS

[0023] The present invention can be more readily understood by a consideration of the following detailed description when taken in conjunction with the accompanying drawings, in which:

[0024] FIG. 1 is a perspective drawing of the convertible towel in accordance with the present invention showing a pocket formed in one end region of the towel, showing a zipper closure for the pocket and showing tote bag carrying straps extending from inside the pocket.

[0025] FIG. 2 is a cross-sectional drawing, taken along line 2-2 of FIG. 1 showing features of the pocket.

[0026] FIG. 3 is a perspective drawing similar to FIG. 1, showing regions of the towel in the process of being tucked into the pocket.

[0027] FIG. 4 is a partially cutaway perspective drawing showing the pocket turned inside out to form a tote bag with regions of the towel retained inside the tote bag.

[0028] FIG. 5 is a front view representation of an alternative embodiment of the towel, wherein the towel can be divided into separate parts and wherein their extra mouths and pockets in the towel.

[0029] FIG. 6 is a perspective view of the towel of FIG. 5 partly rolled towards the pocket at the one end.

[0030] FIG. 7 is a view of the invented towel showing extra pockets on the outside.

[0031] FIG. 8 is a perspective drawing of the convertible towel in accordance with the present invention showing a pocket formed in one end region of the towel, showing a zipper closure for the pocket and showing tote bag carrying straps extending from inside the pocket, and the corners of the towel being rounded.

[0032] FIGS. 9a to 9f are perspective drawings of the convertible towel in accordance with the present invention showing a pocket formed in one end region of the towel, showing a closure for the pocket and showing tote bag, and wherein portions of the towel are separable and wherein a bag of a size smaller than the width of the towel is used to hold a folded towel. FIGS. 9a to 9f show the folding of the towel in its different stages.

[0033] FIGS. 10a to 10f are side view drawings of the convertible towel in accordance with the present invention showing a pocket formed in one end region of the towel, showing a zipper closure for the pocket and showing tote bag carrying straps extending from inside the pocket. FIGS. 10a to 10f show the folding of the towel in its different stages.

[0034] FIG. 11 is a side view of a towel with a heat pack or icepack in a pocket.

[0035] FIG. 12 is a side view of a towel with a heat pack or icepack in a pocket, and the pocket towel inverted.

[0036] FIGS. 13a to 13e are drawings of the convertible towel in accordance with the present invention showing a pocket formed in a mid region of the towel, showing a closure for the pocket and showing tote bag. FIGS. 13a to 13e show the folding of the towel in its different stages.

[0037] FIG. 14 is front view of a towel with a circular shaped portion of the towel and a pocket region at one end.

[0038] In the various Figures, the same elements and features are given the same reference numbers.

## DESCRIPTION

[0039] Shown in perspective in FIG. 1 is a convertible towel to tote bag article 10 in accordance with a preferred embodiment of the invention. Convertible article 10 converts, in the manner described below, into a tote bag. Shown comprising convertible article 10 are a towel 12 and a pocket 14. Towel 12 is formed of a rectangular piece of a fabric, such as a heavy cotton towel fabric or a terry cloth material.

[0040] Towel 12 has respective first and second long side edges 16 and 18 and has a length, L, that may, for example, be about 72 inches. In addition, towel 12 has respective first and second short end edges 20 and 22 and has a width, W, that may, for example, be about 36 to 38 inches and width, W, is between about 13 $\frac{1}{2}$  inches and about 14 inches.

[0041] Pocket 14 is shown as a flat pocket, but alternatively may be of an expandable "cargo" type. As shown in FIGS. 1 and 2, pocket 14 is formed by attaching a piece of fabric 30 across a first end region of towel 12, for example by sewing edges of the fabric piece to towel end 22 and along towel side edges 16 and 18. Alternatively, fabric piece 30 may comprise a folded over end of towel 14. Pocket 14 has a depth, D, that may, for example, be about 12 to about 18 inches and has an opening 32 that faces towel second end 22. A pocket closure zipper 34 is provided for closing pocket opening 32, a first zipper half 36 being sewn to an edge of fabric piece 30 at opening 32 and a mating, second zipper half 38 being sewn at an upper surface 40 of towel 12 adjacent the first zipper half.

[0042] As shown in FIG. 2 pocket 14 may include a sewn in lining 42 that forms an inside of the pocket. Lining 42 may be formed of a waterproof material, of a decorative material, or of a decorative waterproof material. Respective first and second carrying strap sections 44 and 46 (FIG. 1) are each attached at one end inside pocket 14.

[0043] A first step of converting article 10 into a tote bag is depicted in FIG. 3. A region of towel 12 adjacent second towel end 22 is inserted into pocket 14. The exposed towel region intermediate first and second ends 20 and 22 are then tucked into the pocket until the entire, previously exposed region of towel 12 is stowed inside pocket 30.

[0044] Pocket 30 is then turned inside out to form tote bag 50 (FIG. 4) with towel 12 contained inside, and with lining 42 now forming the outside of the tote bag. Carrying strap sections 44 and 46 are now completely exposed and may be joined together by a buckle 52. As depicted, zipper halves 36 and 38 will now line up and pocket (now tote bag) opening 30 (shown open) may be zippered closed.

[0045] The invented towel to tote bag convertible article has a towel having a material with a first surface and an opposite surface; and a pocket formed on a first surface. The pocket includes a layer of material that in a first condition lies substantially adjacent to the first surface. The pocket has an opening between the layer and the first surface and is sized to receive and contain the material of the towel. The pocket is configured for being turned inside out to form a tote bag containing said towel.

[0046] There is a lining attached to said pocket, and the lining forms the outside of said tote bag when said pocket is turned inside out. The lining is constructed from a waterproof material, and also the material on the surface of the towel facing the lining of the layer is formed of a waterproof material. In other cases and and/or additionally the lining surface may be formed of a decorative surface.

[0047] A closure for enabling the closing of said pocket opening before and after said pocket is turned inside out, and wherein said closure means is selectively a zipper or a Velcro or other buttoning system.

[0048] In other forms there are at least some other pockets located with the surface of the material. The towel material can be formed with multiple plies, and the other pockets are defined between the multiple plies. There can be multiple different pockets located with surface of the towel. Selectively there are other pockets located on both surfaces of the layer.

[0049] The material for the towel includes areas for separation so that the material is selectively separable into different components, and there are joinder elements to rejoin the components.

[0050] The convertible towel to tote bag of FIGS. 5 through 7 can have a longitudinal pocket 60 running along the one side of the towel 12 is a pocket which can have a zipper or Velcro configuration 62 for affecting closure. In effect the portion of the towel 12 is a double ply. Between the two plies forming the towel 12. Different items can be stored there, as this is desired by inserting items through the mouth 60. After closing the mouth 60 these items are relatively secure in the pocket.

[0051] Also that the extremity of the towel 12 there are two grommets 64 which can be used for hooking the towel as desired for instance to a golf bag or on a hook in an athletic club. A loop 66 is shown in one of the grommets 64.

[0052] Additionally the towel 12 can be formed in segments 68 and 70 and 72, and the segments can be connected with a Velcro strip 74 and 76 respectively. This permits the towel to be divided into segmented smaller sizes as may be desired. Alternatively with the Velcro strip 74 and 76 connected a full-size towel 12 is achieved.

[0053] The outside of the pocket 14 is provided with an additional pocket 78. The mouth for the pocket is indicated as 80. This pocket 78 can be for securing small elements or smaller towel as may be necessary the walls of the pocket are shown in the phantom lines 82.

[0054] Also on the reverse side as shown in FIG. 7 there are two additional pockets 84 and 86 which can be used for securing further items. The pockets can be closed by any suitable means.

[0055] In FIG. 8 the towel 12 has a planar face has four corners 90, 92, 94 and 96 of the towel 12 which are rounded to facilitate a smooth construction when folded out of the planar layout. The pocket 14 is also constructed with rounded corners 94 and 96 such that pocket 14 can be inverted easily with two corners 94 and 96 of the pocket being uncreased or being flat. Thus when the pocket 14 is inverted, the towel 12 can be located in the inverted pocket 14 easily and in a manner that it does not create an uneven construct when the pocket 14 is inverted. The inversion can be easily effected without creases and the need to force the corners to be smoothed. Thus when the pocket is located at one end of the towel, the towel has rounded corners 94 and 96 at least at the two ends where the pocket is located rather than straight edged corners. These rounded corners are co extensive with the corners of the pocket. The other two corners 90 and 92 of the towel at the opposite end are rounded as shown in FIG8 but they could be straight edged as desired.

[0056] In FIGS. 9a to 9d the pocket 14 occupies the width 98 less than the width 100 of the towel 12. As shown in FIGS. 9a to 9f the towel 12 includes partially separable

areas 102 and 104 so that when the areas 102 and 104 are separated from the pocket area 14, folding is facilitated into a smaller width of size. In this fashion a pocket 14 can be located over only a portion 98 of the width 100 and can be effectively smaller than the entire width 100 of the towel. The towel 12 can be compactly folded into a pocket or bag 14, which is of a smaller size than a bag, which would otherwise be located over the entire width 100 of the towel 12. The portions 102 and 104 are separated from the pocket 14 and folded over the towel portion 12. The two side strips 106 and 108 are folded over a central portion 110 folded, and then the folded format is folded underneath as indicated by line 113 and arrow 114. The underneath folded portion 116 is then fitted into the pocket when pocket is inverted as indicated by arrows 118. The pocket 14 is then inverted so the lining 42 is on the outside.

**[0057]** The folding of the towel 12 underneath the pocket 14 and then into an inverted pocket is shown further in FIGS. 10a to 10f. This folding technique is applicable whether the pocket is of the full width or a partial width of the towel

**[0058]** As shown in FIGS. 11 and 12 the pocket 14 is arranged to receive an ice pack or heat pack 120. The pocket 14 is thereafter closed such that the item becomes a device for use for instance medically on the surface of the body. The purpose is to apply heat or cold as may be necessary the bag or towel can wrap around the body to ensure anchorage on the body of the ice pack or heat pack as necessary. In FIG. 11 the pack is located adjacent the waterproof lining. In FIG. 12 the ice pack or heat pack is contained in the towel with the waterproof lining of the pocket inverted, and the towel 12 folded inside the pocket 14. Zipper portions 36 and 38 or other closure members such as Velcro™ can form the closure 122 or the like or other closure systems.

**[0059]** The towel 12 to tote bag 14 convertible article 10 shown in FIGS. 13a to 13e are arranged with a pocket 14 in a position between the ends 20 and 22 such that the ends 20 and 22 can be folded and located in the pocket 14. This position of the pocket 14 is about midway between the ends 20 and 22. The pocket 14 is turned inside out to receive these ends 20 and 22. The pocket 14 can be located in other areas of the intermediate area away from the areas adjacent the ends 20 and 22. In some other

cases this can be at another suitable location, and may not extend across the entire width of the towel 12. As shown in the series of drawings FIGS. 13a to 13e the towel 12 is folded under the pocket 14 initially and then the pocket 14 is inverted so that the towel 12 is located in the pocket. There can be an outer waterproof and/or decorative lining 42 on the outside of the pocket 14 in the arrangement of FIG. 13e.

[0060] A portion of the towel 12 can have features such that the towel 12 is for instance not rectilinear. As shown in FIG. 14 it is shaped in a rounded fashion 122 for instance as a basketball. In other cases it can be the shape of a football. Other shapes can be provided in adherence with the pocketed portion. Different printing can be applied to the planar surface, and different figures and shapes can be used. In yet another form, the towel can include partially separable areas so that when the areas are separated folding is facilitated into a smaller width of size. In this fashion a bag can be located over only a portion of the width and can be effectively smaller than the entire width of the towel. In this manner the towel can be compactly folded into a bag alternatively smaller size than a bag located over the entire width of the towel.

[0061] There is also a sheet material to bag convertible article which is not in the nature of a towel. The article comprises a sheet material of a selected shape having a first end region, a second end region and an intermediate region between said first and second end regions; and a pocket formed along the sheet material at a region between the ends. The pocket has an opening facing said second end region and is sized to receive and contain at least one end region and said intermediate region. The pocket is configured for being turned inside out to form a bag containing at least one said end region and said intermediate region.

[0062] A closure means enables the closing of said pocket opening after said pocket is turned inside out. Where there is a lining it is preferably attached to said pocket, said lining forming the outside of said bag when said pocket is turned inside out. The lining is constructed from a waterproof material.

[0063] The sheet material is a fabric or natural product such as leather. The convertible product can be blanket in its extended form or other article of utility for use

by a user as a consumer or fashion article to be used for multiple purposes where in one form it is used as sheet material and the other as a pocket.

[0064] Although there has been described above a towel that is convertible into a tote bag in accordance with the present invention for purposes of illustrating the manner in which the present invention maybe used to advantage, it is to be understood that the invention is not limited thereto. For instance although the pocket is shown essentially as rectilinear there can be other shaped pockets for instance round, or triangular. The pocket can be located at different locations relative to the main towel area. Consequently, any and all variations and equivalent arrangements, which may occur to those skilled in the applicable art, are to be considered to be within the scope and spirit of the invention as set forth in the claims that are appended hereto as part of this application.